

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Knead Dough Baking Company, Inc.
Attn: Les Messina
556 St. James Gate
Bolingbrook, Illinois 60440

Application No.: 94100116

I.D. No.: 197415AAH

Applicant's Designation:

Date Received: December 22, 2005

Subject: Bread Bakery

Date Issued:

Expiration Date:

Location: 555 South Joliet Road, Bolingbrook

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of two flour storage silos with pneumatic conveyor and two scales controlled with baghouse; one sifter with filter; two mixers; four baking lines with pan cleaning stations controlled with cyclones/baghouse; one research and development rack oven; two natural gas fired boilers; and two air make-up units pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. to limit the emissions of Volatile Organic Material (VOM) from the source to less than major source thresholds (i.e., 100 tons/year for VOM). As a result, the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year to less than 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205, except reporting requirements of Section 205.300.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205, except reporting requirements of Section 205.300.

- b. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period as described in Attachment B.
- 3a. Operation and VOM emissions from baking ovens #2, #3, #4 and research oven constructed between years 1995 and 1998, shall not exceed 2.5 tons/mo and 24.5 tons/yr;
- b. Operation and VOM emissions from baking oven #1, constructed in the year 2004, shall not exceed 2.5 tons/mo and 24.5 tons/yr;

VOM emissions shall be calculated from the following equation:

$$E = \Sigma (P_i \times EF_i) / 2,000$$

Where:

E - VOM emissions (tons);

P_i - Product i production rate (tons);

EF_i - Product i Emission Factor (lb/ton);

Emissions Factor EF_i shall be calculated using the formula given by AP-42 (Section 9.9.6):

$$EF = 0.95Y_i + 0.19t_i - 0.51Y_s - 0.86t_s + 1.90,$$

Where:

Y_i - Initial baker's percent of yeast (yeast percentage with a reference to flour in the dough);

t_i - Total fermentation time (hours);

Y_s - Second baker's percent of yeast (if applicable);

t_s - Fermentation Time for Second Yeast Percentage (if applicable).

Compliance with annual limits shall be determined from a running total of 12 months of data.

- 4. Operation of the natural gas combustion units shall not exceed the following limits:

Natural Gas usage: 25 mmscf/month, 245 mmscf/year

<u>Pollutant</u>	<u>Emission Factor</u> (Lb/mmscf)	<u>Emissions</u>	
		(Tons/Mo)	(Tons/Yr)
Nitrogen Oxide (NO _x)	100	1.3	12.3
Carbon Monoxide (CO)	84	1.1	10.3
Particulate Matter (PM)	7.6	0.1	0.9
Volatile Organic Material (VOM)	5.5	0.07	0.7

These limits define the potential emissions and are based on the actual emissions determined from the maximum production capacity and standard emission factors. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current month plus preceding 11 months.

5. This permit is issued based on negligible emissions of particulate matter from two flour storage silos, pneumatic conveyor and two scales (flour system baghouse); sifter (sifter filter); two mixers, three baking lines and pan cleaning stations (baking lines control system). For this purpose emissions from each system shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/yr.
- 6a. The Permittee shall maintain daily records of the following items for the each baking oven:
 - i. Amount of each type of product baked (ton/day);
 - ii. Baker's percent of yeast of each type of product (initial and second, wt.%);
 - iii. Fermentation time of each type of product (initial and second, hours).
- b. The Permittee shall maintain monthly records of the following items
 - i. Amount of each type of product baked (ton/mo, ton/yr);
 - ii. Emission factor calculations for each type of product (lbs/ton);
 - iii. Monthly and annual VOM emission with supporting calculations (ton/mo, ton/yr);
 - iv. Natural gas consumption (mmscf/Mo, mmscf/Yr).
7. All records and logs required by this permit shall be retained at a easily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.

8. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control
Compliance Section (#40)
1340 North Ninth Street
P.O. Box 19276
Springfield, IL 62794-9276

and one (1) copy shall be sent to the Illinois EPA regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this permit, please call Valeriy Brodsky at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:VJB:

Attachment

cc: Illinois EPA, FOS Region 2
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emission from the Bread Bakery operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM, at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that material is handled, and control measures are more effective than required in this permit.

<u>Emission Units</u>	<u>VOM</u>	<u>NO_x</u>	<u>CO</u>	<u>PM</u>
Baking Ovens #2, #3, #4	24.5			
Baking Oven #1	24.5			
Natural Gas Combustion Units	0.7	12.3	10.3	0.9
Flour Storage, Transfer and Handling				1.3
Plant-Wide Total	49.7	12.3	10.3	2.2

DES:VJB:

Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the CAA.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' CAAPP permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source should have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

Emissions of VOM from the source during the seasonal allotment period from May 1 through September 30 of each year shall not exceed 15 tons, not including VOM emissions from insignificant emission units and activities as identified in Section 3 of this permit. This limitation is established at the request of the source to exempt it from the requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System (ERMS), pursuant to 35 Ill. Adm. Code 205.205.

3. Recordkeeping and Reporting

- a. The Permittee shall maintain the following records to determine compliance with the above limitation:
 - i. Records of operating data and other information for each individual emission unit or group of related emission units at the source, as specified in Sections 5 and 7 of this permit, as appropriate, to determine actual VOM emissions during the seasonal allotment period;
 - ii. Records of the VOM emissions, in tons, during the seasonal allotment period, with supporting calculations, for each individual emission unit or group of related emission units at the source, determined in accordance with the procedures specified in Condition 3(b) of this permit; and
 - iii. Total VOM emissions from the source, in tons, during each seasonal allotment period.
- b. The Permittee shall submit the seasonal emissions component of the Annual Emissions Report by November 30 of each year, reporting actual emissions of VOM during the seasonal allotment period, in accordance with 35 Ill. Adm. Code 205.205(b) and 35 Ill. Adm. Code 205.300.
- c. In the event that the source's VOM emissions during the seasonal allotment period exceed 15 tons, the source shall no longer be exempt from the ERMS and beginning with the following seasonal allotment period, shall comply with 35 Ill. Adm. Code Part 205, by holding allotment trading units (ATUs) for its VOM emissions during each seasonal allotment period.

VJB: